Attorney's Docket No.: 06275-504US1 / 100974-1P US

Applicant: Brian Springthorpe et al. Serial No.: 10/575,523

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## **Listing of Presently Pending Claims:**

- 1. (Previously Presented) A compound having Formula I or salts thereof and comprising at least
- 1, 2 or 3 tritium substitutions in the meta position:

$$O_2N$$
 $H$ 
 $N$ 
 $N$ 
 $H$ 
 $NO_2$ 

FORMULA I

- 2. (Cancelled)
- 3. (Original) A compound of Formula II:

$$O_2N$$
 $^3H$ 
 $^3H$ 
 $^3H$ 
 $^3H$ 
 $^3H$ 
 $^3H$ 
 $^3H$ 

FORMULA II

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or salts thereof.

4. (Previously Presented) A method of characterizing the activity of a compound as an  $I_{Kr}$  channel blocker comprising the following steps:

a) incubating a cell membrane containing the  $I_{Kr}$  channel in the presence of the compound of Formula II

$$^{3}$$
H  $^{3}$ H  $^{3}$ H  $^{3}$ H  $^{3}$ H  $^{3}$ H  $^{3}$ H

Formula II

in the presence or absence of a test compound;

- b) determining specifically bound labeled\_compound in the presence or absence of a test compound;
- c) calculating the inhibition of labeled compound binding by the test compound.
- 5. (Previously Presented) The method of claim 4 comprising the steps of :
  - a) preparing solutions of test compound at one or more concentrations;
  - b) mixing the compound of Formula II with the cell membrane containing the I<sub>Kr</sub> channel;
  - c) incubating the solutions of test compound with the mixture of compound of Formula II and cell membrane containing the  $I_{Kr}$  channel;
  - d) isolating the membrane from the solutions and measuring the radioactivity of the membrane;
  - e) calculating the radioactivity of samples in the presence of test compound compared to a control in the absence of test compound.

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6. (Previously Presented) The method of claim 4 wherein the I<sub>Kr</sub> channel is human ERG.

- 7. (Previously Presented) The method of claim 6 wherein the cell membrane is derived from a cell line transfected with the human ERG gene.
- 8. (Previously Presented) The method of claim 7 wherein the cell line is HEK.
- 9. (Previously Presented) A method of assaying one or more candidate compounds comprising characterising the  $I_{Kr}$  channel blocker activity of one or more candidate compounds using a compound of Formula II

Formula II.

- 10. (Previously Presented) The method of claim 9 wherein the assay is a competitive binding assay.
- 11. (Original) A process for preparing a compound of Formula II as defined in claim 3, said process comprising tritiating 3,7-Bis[2-(4-nitrophenyl)ethyl]-3,7-diazabicyclo[3.3.1]nonane in the presence of (1,5-cyclooctadiene)bis(methyldiphenyl-phosphine)iridium(I) hexafluorophosphate.

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12. (Original) A process as claimed in claim 11 wherein the 3,7-Bis[2-(4-nitrophenyl)ethyl]-3,7-diazabicyclo[3.3.1]nonane and (1,5-cyclooctadiene)bis(methyldiphenyl-phosphine)iridium(I) hexafluorophosphate are dissolved in dichloromethane.

- 13. (Previously Presented) A process as claimed in claim 11 wherein tritiation is carried out using a tritiation manifold.
- 14. (Cancelled)